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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BOLDEN, ELIZABETH A

ART UNIT PAPER NUMBER

1755

DATE MAILED: 02/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/930,478

Examiner

Elizabeth A. Bolden

Applicant(s)

HAYDEN ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☒ Interview Summary (PTO-413) Paper No(s). 8.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

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DETAILED ACTION

Any rejections and or objections, made in the previous Office Action, and not repeated below, are hereby withdrawn.

Drawings

Color photographs and color drawings are acceptable only for examination purposes unless a petition filed under 37 CFR 1.84(a)(2) is granted permitting their use as acceptable drawings. In the event that applicant wishes to use the drawings currently on file as acceptable drawings, a petition must be filed for acceptance of the color photographs or color drawings as acceptable drawings. Any such petition must be accompanied by the appropriate fee set forth in 37 CFR 1.17(h), three sets of color drawings or color photographs, as appropriate, and an amendment to the first paragraph of the brief description of the drawings section of the specification which states:

The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawing(s) will be provided by the U.S. Patent and Trademark Office upon request and payment of the necessary fee.

Color photographs will be accepted if the conditions for accepting color drawings have been satisfied.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 1, 7, 9, 10, and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claims 1, 7, 9, 10, and 12, when the glass composition comprises the upper limit of SiO₂ at 70 mol% and the lower limit of PbO at 30 mol% and the other required components Al₂O₃, ZrO₂, and Na₂O the glass comprises over 100 mol% of components. This renders these claims indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1, 2, 4, 5, 7-10, 12-18, and 20-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishizawa et al., Japanese Patent Publication JP 04-023308.

Nishizawa et al. disclose a glass having overlapping ranges of components. See Derwent Abstract of Nishizawa et al. The disclosed ranges of components are sufficiently specific to anticipate all the limitations of instant claims 1, 2, 4, 5, 7-10, 12, and 20-26. See MPEP 2131.03.

Since the composition of the reference is the same as those claimed herein it follows that the glasses of Nishizawa et al. would inherently possess the same Stress optic coefficient, acid resistance, and climatic resistance as recited in claims 13-18. See MPEP 2112.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 and 12-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanbara et al., U.S. Patent 4,123,731.

Kanbara et al. teach an alkali lead silicate glass. See abstract of Kanbara et al. and column 2, lines 15-34.

Kanbara et al. differs from the instant claims by not teaching the glass compositional ranges in terms of mol percent.

It appears that the compositional ranges of Kanbara et al. if converted from wt % to mol % would overlap the compositional ranges of instant claims 1-10, 12, and 19-26. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges taught by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

One of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the same properties as recited in claims 13-18.

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Claims 1-3, 7, 9, 10, 12, 13, 15, 17-20, 22, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Speit et al., U.S. Patent 4,520,115.

Speit et al. teach an alkali lead silicate glass. See abstract of Speit et al., column 2, lines 39-61, and column 6, lines 4-23.

Speit et al. differs from the instant claims by not teaching the glass compositional ranges in terms of mol percent.

It appears that the compositional ranges of Speit et al. if converted from wt % to mol % would overlap the compositional ranges of instant claims 1-3, 7, 9, 10, 12, 19, 20, 22, and 24-26. See theoretical composition below. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

	SiO ₂	Al ₂ O ₃	Na ₂ O	K ₂ O	ZnO	PbO	ZrO ₂	As ₂ O ₃
Wt%	30.5	2.0	2.0	1.0	2.0	60.0	2.0	0.5
Mol%	57.6	2.2	3.7	1.2	2.8	30.4	1.9	0.3

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges taught by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

One of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the same properties as recited in claims 13-18.

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Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffmann et al., German Patent Publication DE 3504558.

Hoffmann et al. teach an optical glass. See Derwent Abstract of Hoffmann et al.

Hoffmann et al. differs from the instant claims by not teaching the glass compositional ranges in terms of mol percent.

It appears that the compositional ranges of Hoffmann et al. if converted from wt % to mol % would overlap the compositional ranges of instant claims 1-10, 12, and 19-26. See theoretical composition below. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

	SiO ₂	Al ₂ O ₃	Na ₂ O	K ₂ O	PbO	ZrO ₂	As ₂ O ₃
Wt%	30.0	1.0	1.5	1.0	64.0	2.0	0.5
Mol%	58.8	1.2	2.9	1.3	33.7	1.9	0.3

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges taught by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

One of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the same properties as recited in claims 13-18.

Response to Arguments

Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection with the exception of the rejections over Kanbara et al. discussed below.

Applicant's arguments with respect to Kanbara et al., US 4,123,731, filed 29 July 2003 have been fully considered but they are not persuasive.

Applicants' argue that Kanbara et al. requires TiO₂. This is deemed not persuasive since the glasses of Kanbara et al. disclose TiO₂ in a content of 0-4 wt%. See column 2, line 29 and column 3, lines 56-61. Therefore, Kanbara et al. does not require TiO₂ as a glass component.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Bolden whose telephone number is 703-305-0124.

The examiner can normally be reached on 9:30 am-7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L. Bell can be reached on 703-308-3823. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

After the move to Carlyle, tentatively scheduled for the week of December 22, 2003, the examiner's new phone number will be (571) 272-1363 and Mark Bell's new phone number will be (571) 273-1362.


DAVID SAMPLE
PRIMARY EXAMINER

EAB
16 October 2003